Q.1.

```
dosseg
.model small
.stack 100h
.data
      str1 db 10,13,'Enter a number to find its fib series $'
      num db ?
      str2 db 10,13,'The answer is $'
      num2 db ?
.code

fib proc

      mov al,1
      mov bl,1

      mov cx,5

      l1:
            add al,bl    ;1+1=2
            mov dl,al
            mov al,bl
            mov bl,dl
      loop l1

      ;sub bl,1

      mov num2,bl

      mov dl,num2
      add dl,30h
      mov ah,02h
      int 21h


      ret
fib endp


main proc

      mov ax,@data
      mov ds,ax

      ;mov dx,offset str1
      ;mov ah,09h
      ;int 21h


      ;mov ah,01h
      ;int 21h
      ;mov num,al
      call fib
      ;*****************


      mov ah,4ch
```

```
       int 21h

main endp
end main
```

Q.2.

```
dosseg
.model small
.stack 100h
.data
	arr db '5','2','3','4','5','5'
	str1 db 10,13,'Enter a number to find $'
	num db ?
	num1 db ?
	str2 db 10,13,'Found $'
	str3 db 10,13,'Not Found $'
	str4 db 10,13,'Back in main $'
	str5 db 10,13,'Enter number to find its count $'
	count1 db ?
	str6 db 10,13,'The number of times this number is repeated is = $'
	str7 db 10,13,'Now finding the largest number in the array $'
	max1 db 0
	str8 db 10,13,'The max number is = $'
	str9 db 10,13,'Now finding the minimum number in the array $'
	min1 db 9
	str10 db 10,13,'The minimum number is = $'
.code

find proc

	mov si,offset arr

	mov cx,6
	mov al,num
	;mov dl,al
	;add dl,30h
	;mov ah,02h
	;int 21h
	l1:

		cmp al,[si]
		je found

		inc si

	loop l1

	notfound:
		mov dx,offset str3
		mov ah,09h
		int 21h
		jmp f2

	found:
		mov dx,offset str2
		mov ah,09h
		int 21h

	f2:
		mov dx,offset str4
		mov ah,09h
		int 21h
```

```
      ret
find endp

count proc
      mov si,offset arr
      mov bl,0
      mov cx,6
      ;mov num1,al
      ;mov dl,al
      ;add dl,30h
      ;mov ah,02h
      ;int 21h
      l1:
            cmp al,[si]
            je here

            notcount:
                  jmp e

            here:
                  inc bl


            e:


            inc si

      loop l1

      mov count1,bl
      mov dx,offset str6
      mov ah,09h
      int 21h

      mov dl,count1
      add dl,30h
      mov ah,02h
      int 21h

      ret
count endp

maxnum proc


      mov si,offset arr
      mov cx,6

      l1:
            mov al,max1
            cmp [si],al
            jg here

            jmp e

            here:
```

```
                mov al,[si]
                mov max1,al

            e:


            inc si
      loop l1

      mov dx,offset str8
      mov ah,09h
      int 21h

      mov dl,max1
      ;add dl,30h
      mov ah,02h
      int 21h

      ret
maxnum endp


minnum proc
      mov si,offset arr
      mov cx,6

      l1:
            mov al,max1
            cmp [si],al
            jl here

            jmp e

            here:
                  mov al,[si]
                  mov max1,al

            e:


            inc si
      loop l1

      mov dx,offset str10
      mov ah,09h
      int 21h

      mov dl,max1
      ;add dl,30h
      mov ah,02h
      int 21h

      ret
minnum endp

main proc

      mov ax,@data
```

```
        mov ds,ax



        mov dx,offset str1
        mov ah,09h
        int 21h


        mov ah,01h
        int 21h

        mov num,al

        call find



        mov dx,offset str5
        mov ah,09h
        int 21h


        mov ah,01h
        int 21h

        mov num1,al
        call count



        mov dx,offset str7
        mov ah,09h
        int 21h

        call maxnum


        mov dx,offset str9
        mov ah,09h
        int 21h

        call minnum
        ;*********************************
        mov ah,4ch
        int 21h
main endp
end main
```